

### ABSTRACT OF THE DISCLOSURE

An improved method of nuclear transfer involving the transplantation of donor differentiated cell nuclei into enucleated oocytes of the same species as the donor cell is provided. The resultant nuclear transfer units are useful for multiplication of  
5 genotypes and transgenic genotypes by the production of fetuses and offspring, and for production of isogenic CICM cells, including human isogenic embryonic or stem cells. Production of genetically engineered or transgenic mammalian embryos, fetuses and offspring is facilitated by the present method since the differentiated cell source of the donor nuclei can be genetically modified and clonally propagated.